Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.002
Model:                             OLS   Adj. R-squared:                 -0.001
Method:                  Least Squares   F-statistic:                    0.5135
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.474
Time:                         19:11:12   Log-Likelihood:                -7987.7
No. Observations:                  335   AIC:                         1.598e+04
Df Residuals:                      333   BIC:                         1.599e+04
Df Model:                            1
Covariance Type:            nonrobust
=====================================================================================
                        coef    std err          t      P>|t|      [0.025      0.975]
-------------------------------------------------------------------------------------
const             -8.236e+08   4.22e+08     -1.950      0.052   -1.65e+09    7.04e+06
# of past defaults  1.946e+08   2.72e+08      0.717      0.474    -3.4e+08    7.29e+08
==============================================================================
Omnibus:                      291.175   Durbin-Watson:                   2.412
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            17811.958
Skew:                          -3.116   Prob(JB):                         0.00
Kurtosis:                      38.174   Cond. No.                         2.72
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.9053011880289863
LM P-Value: 0.6359402961575973
F Statistic: 0.44981257633600347
F P-Value: 0.6381357504703624

Rainbow Test Results:

Rainbow Statistic: 3.302759235763397
Rainbow P-Value: 3.9575287927180915e-14

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.001
Model:                             OLS   Adj. R-squared:                 -0.003
Method:                  Least Squares   F-statistic:                    0.2507
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.617
Time:                         19:11:12   Log-Likelihood:                -5352.1
No. Observations:                  223   AIC:                         1.071e+04
Df Residuals:                      221   BIC:                         1.072e+04
Df Model:                            1
Covariance Type:             nonrobust
================================================================================================================
                                                coef    std err          t      P>|t|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------------
const                                     -5.383e+08   8.06e+08     -0.668      0.505   -2.13e+09    1.05e+09
Adjusted savings: gross savings (% of GNI) -1.862e+07   3.72e+07     -0.501      0.617   -9.19e+07    5.47e+07
==============================================================================
Omnibus:                      194.421   Durbin-Watson:                   2.342
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             6721.074
Skew:                          -3.049   Prob(JB):                         0.00
Kurtosis:                      29.194   Cond. No.                         40.6
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.28839570222092803
LM P-Value: 0.8657164481532115
F Statistic: 0.14244218366765066
F P-Value: 0.8673176101301003

Rainbow Test Results:

Rainbow Statistic: 4.578190390913432
Rainbow P-Value: 1.3446656328289334e-14

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.000
Model:                           OLS   Adj. R-squared:                 -0.004
Method:                Least Squares   F-statistic:                   0.07854
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.780
Time:                       19:11:13   Log-Likelihood:                -5352.2
No. Observations:                223   AIC:                         1.071e+04
Df Residuals:                    221   BIC:                         1.072e+04
Df Model:                          1
Covariance Type:           nonrobust
==================================================================================================================
                                              coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------------------------------
const                                   -9.616e+08   5.22e+08     -1.841      0.067   -1.99e+09    6.76e+07
Adjusted savings: net national savings (% of GNI)  1.024e+07   3.65e+07      0.280      0.780   -6.18e+07    8.22e+07
==============================================================================
Omnibus:                      194.586   Durbin-Watson:                   2.349
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             6631.745
Skew:                          -3.060   Prob(JB):                         0.00
Kurtosis:                      29.005   Cond. No.                         17.3
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.016174179639026676
LM P-Value: 0.9919455227186376
F Statistic: 0.007978873596532716
F P-Value: 0.9920531601860565

Rainbow Test Results:

Rainbow Statistic: 4.560502418242041
Rainbow P-Value: 1.542954791675565e-14

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.017
Model:                             OLS   Adj. R-squared:                 -0.014
Method:                  Least Squares   F-statistic:                    0.5467
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.465
Time:                         19:11:14   Log-Likelihood:                -821.20
No. Observations:                   33   AIC:                             1646.
Df Residuals:                       31   BIC:                             1649.
Df Model:                            1
Covariance Type:             nonrobust
=========================================================================================
                            coef    std err          t      P>|t|      [0.025      0.975]
-----------------------------------------------------------------------------------------
const                 -4.999e+09   2.92e+09     -1.709      0.097    -1.1e+10    9.66e+08
Banking Crisis Dummy   7.173e+09    9.7e+09      0.739      0.465   -1.26e+10     2.7e+10
==============================================================================
Omnibus:                        7.103   Durbin-Watson:                   2.703
Prob(Omnibus):                  0.029   Jarque-Bera (JB):                5.904
Skew:                          -0.718   Prob(JB):                       0.0522
Kurtosis:                       4.495   Cond. No.                         3.51
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.13980208547518647
LM P-Value: 0.7084778454042329
F Statistic: 0.13188796552607274
F P-Value: 0.7189472486068704

Rainbow Test Results:

Rainbow Statistic: 4.589165306312617
Rainbow P-Value: 0.0030894255914414408

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.003
Model:                            OLS   Adj. R-squared:                 -0.001
Method:                 Least Squares   F-statistic:                    0.3651
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.546
Time:                        19:11:14   Log-Likelihood:                -6725.3
No. Observations:                 284   AIC:                         1.345e+04
Df Residuals:                     282   BIC:                         1.346e+04
Df Model:                           1
Covariance Type:                  HC3
==================================================================================================
                                   coef    std err          z      P>|z|      [0.025      0.975]
--------------------------------------------------------------------------------------------------
const                        -1.176e+08    3.3e+08     -0.357      0.721   -7.64e+08    5.29e+08
Broad money growth (annual %) -1.121e+07   1.86e+07     -0.604      0.546   -4.76e+07    2.52e+07
==============================================================================
Omnibus:                      206.300   Durbin-Watson:                   2.512
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            15037.720
Skew:                          -2.155   Prob(JB):                         0.00
Kurtosis:                      38.387   Cond. No.                         37.8
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 5.6245086805820375
LM P-Value: 0.06006942271980481
F Statistic: 2.838768118113608
F P-Value: 0.06017668211337761

Rainbow Test Results:

Rainbow Statistic: 4.637617558371174
Rainbow P-Value: 1.913141122858656e-18

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.001
Model:                           OLS   Adj. R-squared:                 -0.003
Method:                Least Squares   F-statistic:                    0.2436
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.622
Time:                       19:11:15   Log-Likelihood:                -6145.4
No. Observations:                259   AIC:                         1.229e+04
Df Residuals:                    257   BIC:                         1.230e+04
Df Model:                          1
Covariance Type:           nonrobust
==================================================================================================
                                     coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------
const                           -4.12e+08   3.48e+08     -1.185      0.237    -1.1e+09    2.73e+08
Broad money to total reserves ratio  1.292e+07   2.62e+07      0.494      0.622   -3.86e+07    6.45e+07
==============================================================================
Omnibus:                      187.333   Durbin-Watson:                   2.522
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            11648.154
Skew:                          -2.138   Prob(JB):                         0.00
Kurtosis:                      35.574   Cond. No.                         15.2
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.16430608807194835
LM P-Value: 0.9211309743062451
F Statistic: 0.0812530101832253
F P-Value: 0.9219841634933656

Rainbow Test Results:

Rainbow Statistic: 4.593849308002938
Rainbow P-Value: 9.172095428304808e-17

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.000
Model:                             OLS   Adj. R-squared:                 -0.004
Method:                  Least Squares   F-statistic:                   0.04564
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.831
Time:                         19:11:15   Log-Likelihood:                -6501.9
No. Observations:                  272   AIC:                         1.301e+04
Df Residuals:                      270   BIC:                         1.302e+04
Df Model:                            1
Covariance Type:            nonrobust
==============================================================================
                 coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------
const      -6.722e+08    4.6e+08     -1.460      0.146   -1.58e+09    2.34e+08
CA          9.247e+06   4.33e+07      0.214      0.831    -7.6e+07    9.45e+07
==============================================================================
Omnibus:                      254.090   Durbin-Watson:                   2.323
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            12532.045
Skew:                          -3.444   Prob(JB):                         0.00
Kurtosis:                      35.532   Cond. No.                         13.9
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 1.5082351531054918
LM P-Value: 0.4704255461631225
F Statistic: 0.7499586104128141
F P-Value: 0.47337116082350106

Rainbow Test Results:

Rainbow Statistic: 4.597933771818248
Rainbow P-Value: 1.4311700323094948e-17

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.000
Model:                            OLS   Adj. R-squared:                 -0.017
Method:                 Least Squares   F-statistic:                  0.005668
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.940
Time:                        19:11:16   Log-Likelihood:                -1479.7
No. Observations:                  61   AIC:                             2963.
Df Residuals:                      59   BIC:                             2968.
Df Model:                           1
Covariance Type:            nonrobust
=========================================================================================================
                                              coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------
const                                   -1.543e+09   1.93e+09     -0.800      0.427    -5.4e+09    2.32e+09
Central government debt, total (% of GDP) -2.429e+06   3.23e+07     -0.075      0.940    -6.7e+07    6.21e+07
==============================================================================
Omnibus:                       68.782   Durbin-Watson:                   2.008
Prob(Omnibus):                  0.000   Jarque-Bera (JB):              985.789
Skew:                          -2.808   Prob(JB):                    8.68e-215
Kurtosis:                      21.876   Cond. No.                         107.
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.9967780614616802
LM P-Value: 0.6075085494298886
F Statistic: 0.4817501935479061
F P-Value: 0.6201508475092281

Rainbow Test Results:

Rainbow Statistic: 4.594288552455146
Rainbow P-Value: 5.315670184324722e-05

Regression Summary:

```
                           OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.005
Model:                           OLS   Adj. R-squared:                  0.001
Method:                Least Squares   F-statistic:                     1.371
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.243
Time:                       19:11:16   Log-Likelihood:                -6781.3
No. Observations:                284   AIC:                         1.357e+04
Df Residuals:                    282   BIC:                         1.357e+04
Df Model:                          1
Covariance Type:           nonrobust
==========================================================================================================
                                            coef    std err          t      P>|t|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------
const                                  -8.17e+08   3.73e+08     -2.188      0.029   -1.55e+09    -8.2e+07
Claims on central government, etc. (% GDP)  2.081e+07   1.78e+07      1.171      0.243   -1.42e+07    5.58e+07
==============================================================================
Omnibus:                      275.067   Durbin-Watson:                   2.355
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            14972.952
Skew:                          -3.658   Prob(JB):                         0.00
Kurtosis:                      37.811   Cond. No.                         23.2
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 1.272608974646646
LM P-Value: 0.5292446448870947
F Statistic: 0.6324168319503994
F P-Value: 0.5320606590831539

Rainbow Test Results:

Rainbow Statistic: 4.569844437797747
Rainbow P-Value: 3.741884664699324e-18

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.122
Model:                             OLS   Adj. R-squared:                  0.119
Method:                  Least Squares   F-statistic:                     1.649
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.200
Time:                         19:11:17   Log-Likelihood:                -6660.4
No. Observations:                  282   AIC:                         1.332e+04
Df Residuals:                      280   BIC:                         1.333e+04
Df Model:                            1
Covariance Type:                   HC3
==================================================================================================================================
                                                                 coef    std err          z      P>|z|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------------------------------
const                                                       6.607e+08    6.6e+08      1.001      0.317   -6.32e+08    1.95e+09
Claims on private sector (annual growth as % of broad money) -7.493e+07   5.84e+07     -1.284      0.199   -1.89e+08    3.94e+07
==============================================================================
Omnibus:                      113.612   Durbin-Watson:                   2.260
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            10481.837
Skew:                          -0.538   Prob(JB):                         0.00
Kurtosis:                      32.848   Cond. No.                         29.5
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 14.126053244461739
LM P-Value: 0.0008561828265319476
F Statistic: 7.356387030056221
F P-Value: 0.0007701066194625382

Rainbow Test Results:

Rainbow Statistic: 3.9389245245264997
Rainbow P-Value: 3.1685775949676188e-15

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.001
Model:                            OLS   Adj. R-squared:                 -0.002
Method:                 Least Squares   F-statistic:                    0.3664
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.545
Time:                        19:11:17   Log-Likelihood:                -6616.6
No. Observations:                 278   AIC:                         1.324e+04
Df Residuals:                     276   BIC:                         1.324e+04
Df Model:                           1
Covariance Type:            nonrobust
==========================================================================================================
                                    coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------------
const                         -8.262e+08   5.88e+08     -1.405      0.161   -1.98e+09    3.31e+08
Consumer price index (2010 = 100)  4.663e+06    7.7e+06      0.605      0.545   -1.05e+07    1.98e+07
==============================================================================
Omnibus:                      264.842   Durbin-Watson:                   2.562
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            20209.032
Skew:                          -3.394   Prob(JB):                         0.00
Kurtosis:                      44.214   Cond. No.                         142.
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.08785462233940122
LM P-Value: 0.9570235198650396
F Statistic: 0.04346701204890992
F P-Value: 0.9574707152219372

Rainbow Test Results:

Rainbow Statistic: 3.561257344029075
Rainbow P-Value: 2.868291951189863e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.037
Model:                            OLS   Adj. R-squared:                  0.020
Method:                 Least Squares   F-statistic:                     2.139
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.149
Time:                        19:11:17   Log-Likelihood:                -1395.8
No. Observations:                  57   AIC:                             2796.
Df Residuals:                      55   BIC:                             2800.
Df Model:                           1
Covariance Type:            nonrobust
==============================================================================================================
                                                  coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------------------
const                                       -7.268e+08   1.86e+09     -0.390      0.698   -4.46e+09    3.01e+09
Cyclically adjusted balance (% of potential GDP)  4.803e+08   3.28e+08      1.463      0.149   -1.78e+08    1.14e+09
==============================================================================
Omnibus:                       34.568   Durbin-Watson:                   1.607
Prob(Omnibus):                  0.000   Jarque-Bera (JB):              163.404
Skew:                          -1.433   Prob(JB):                     3.29e-36
Kurtosis:                      10.784   Cond. No.                         7.61
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 1.5057379773600306
LM P-Value: 0.4710132806377981
F Statistic: 0.7325969191577831
F P-Value: 0.4853746247843367

Rainbow Test Results:

Rainbow Statistic: 8.166993080228645
Rainbow P-Value: 3.4456134084925556e-07

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.112
Model:                             OLS   Adj. R-squared:                  0.095
Method:                  Least Squares   F-statistic:                     6.800
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):             0.0118
Time:                         19:11:18   Log-Likelihood:                -1368.7
No. Observations:                   56   AIC:                             2741.
Df Residuals:                       54   BIC:                             2745.
Df Model:                            1
Covariance Type:            nonrobust
==================================================================================================================================
                                                      coef    std err          t      P>|t|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------------------------------
const                                           -8.953e+08   1.45e+09     -0.616      0.541   -3.81e+09    2.02e+09
Cyclically adjusted primary balance (% of potential GDP)  8.662e+08   3.32e+08      2.608      0.012       2e+08    1.53e+09
==============================================================================
Omnibus:                       38.952   Durbin-Watson:                   1.560
Prob(Omnibus):                  0.000   Jarque-Bera (JB):              179.518
Skew:                          -1.724   Prob(JB):                     1.04e-39
Kurtosis:                      11.065   Cond. No.                         4.73
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.249662897461973
LM P-Value: 0.882645661093792
F Statistic: 0.1186731260579428
F P-Value: 0.8883333663627215

Rainbow Test Results:

Rainbow Statistic: 7.296084018176722
Rainbow P-Value: 1.2004971900888514e-06

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.012
Model:                            OLS   Adj. R-squared:                  0.008
Method:                 Least Squares   F-statistic:                   0.07126
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.790
Time:                        19:11:18   Log-Likelihood:                -5975.2
No. Observations:                 252   AIC:                         1.195e+04
Df Residuals:                     250   BIC:                         1.196e+04
Df Model:                           1
Covariance Type:                  HC3
==============================================================================================================
                                                 coef    std err          z      P>|z|      [0.025      0.975]
--------------------------------------------------------------------------------------------------------------
const                                      -3.962e+08   3.21e+08     -1.234      0.217   -1.03e+09    2.33e+08
Debt service on external debt, total (TDS, current US$)     0.0830      0.311      0.267      0.790      -0.527       0.693
==============================================================================
Omnibus:                      254.697   Durbin-Watson:                   2.396
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            16971.534
Skew:                          -3.724   Prob(JB):                         0.00
Kurtosis:                      42.508   Cond. No.                     6.84e+09
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
[2] The condition number is large, 6.84e+09. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 104.75617579717205
LM P-Value: 1.3812888418637108e-24
F Statistic: 177.86174796178668
F P-Value: 5.252001959809037e-31

Rainbow Test Results:

Rainbow Statistic: 5.771493959180184
Rainbow P-Value: 1.41857818198818e-20

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.076
Model:                           OLS   Adj. R-squared:                  0.072
Method:                Least Squares   F-statistic:                     2.836
Date:               Sat, 26 Aug 2023   Prob (F-statistic):             0.0935
Time:                       19:11:19   Log-Likelihood:                -5776.1
No. Observations:                242   AIC:                         1.156e+04
Df Residuals:                    240   BIC:                         1.156e+04
Df Model:                          1
Covariance Type:                 HC3
=================================================================================================================
                                              coef    std err          z      P>|z|      [0.025      0.975]
-----------------------------------------------------------------------------------------------------------------
const                                     8.202e+08   7.28e+08      1.127      0.260   -6.06e+08    2.25e+09
Domestic credit to private sector (% of GDP) -4.837e+07   2.87e+07     -1.684      0.092   -1.05e+08    7.92e+06
==============================================================================
Omnibus:                     219.273   Durbin-Watson:                   2.348
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            10691.488
Skew:                         -3.174   Prob(JB):                         0.00
Kurtosis:                     34.938   Cond. No.                         61.2
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 12.321988167708367
LM P-Value: 0.0021101545581807967
F Statistic: 6.4110516034784215
F P-Value: 0.0019401462492170283

Rainbow Test Results:

Rainbow Statistic: 7.150990022485511
Rainbow P-Value: 6.66146700891421e-24

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.000
Model:                           OLS   Adj. R-squared:                 -0.003
Method:                Least Squares   F-statistic:                    0.1271
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.722
Time:                       19:11:19   Log-Likelihood:                -7987.9
No. Observations:                335   AIC:                         1.598e+04
Df Residuals:                    333   BIC:                         1.599e+04
Df Model:                          1
Covariance Type:           nonrobust
==========================================================================================
                             coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------
const                  -7.481e+08   4.88e+08     -1.532      0.126   -1.71e+09    2.12e+08
Dummy for past default  2.209e+08    6.2e+08      0.356      0.722   -9.98e+08    1.44e+09
==============================================================================
Omnibus:                     292.224   Durbin-Watson:                   2.410
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            17849.629
Skew:                         -3.136   Prob(JB):                         0.00
Kurtosis:                     38.206   Cond. No.                         3.01
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.09633262327927661
LM P-Value: 0.7562758244184209
F Statistic: 0.09578504709509929
F P-Value: 0.7571411734969686

Rainbow Test Results:

Rainbow Statistic: 3.3546580109611632
Rainbow P-Value: 1.956045110907372e-14

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.002
Model:                           OLS   Adj. R-squared:                 -0.002
Method:                Least Squares   F-statistic:                    0.4740
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.492
Time:                       19:11:20   Log-Likelihood:                -6396.0
No. Observations:                267   AIC:                         1.280e+04
Df Residuals:                    265   BIC:                         1.280e+04
Df Model:                          1
Covariance Type:           nonrobust
=========================================================================================================
                                             coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------
const                                  -3.093e+08   7.23e+08     -0.428      0.669   -1.73e+09    1.11e+09
Exports of goods and services (% of GDP) -1.355e+07   1.97e+07     -0.688      0.492   -5.23e+07    2.52e+07
==============================================================================
Omnibus:                      218.759   Durbin-Watson:                   2.401
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8952.370
Skew:                          -2.826   Prob(JB):                         0.00
Kurtosis:                      30.799   Cond. No.                         70.5
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.588998156495038
LM P-Value: 0.16621069004744476
F Statistic: 1.79851165418977
F P-Value: 0.16756743984035938

Rainbow Test Results:

Rainbow Statistic: 3.442777693222731
Rainbow P-Value: 3.0365975419730082e-12

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.001
Model:                           OLS   Adj. R-squared:                 -0.003
Method:                Least Squares   F-statistic:                    0.2835
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.595
Time:                       19:11:20   Log-Likelihood:                -5235.0
No. Observations:                218   AIC:                         1.047e+04
Df Residuals:                    216   BIC:                         1.048e+04
Df Model:                          1
Covariance Type:           nonrobust
==============================================================================================================
                                                coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------------------
const                                     -1.015e+09   4.62e+08     -2.196      0.029   -1.93e+09   -1.04e+08
Exports of goods and services (annual % growth)  1.057e+07   1.98e+07      0.532      0.595   -2.85e+07    4.97e+07
==============================================================================
Omnibus:                     187.891   Durbin-Watson:                   2.340
Prob(Omnibus):                 0.000   Jarque-Bera (JB):             6114.910
Skew:                         -2.999   Prob(JB):                         0.00
Kurtosis:                     28.243   Cond. No.                         24.4
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.6260978414318599
LM P-Value: 0.7312141401746481
F Statistic: 0.3096301685049022
F P-Value: 0.7340448769319715

Rainbow Test Results:

Rainbow Statistic: 4.8142408026244565
Rainbow P-Value: 4.203041903605804e-15

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.003
Model:                             OLS   Adj. R-squared:                 -0.001
Method:                  Least Squares   F-statistic:                    0.7384
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.391
Time:                         19:11:20   Log-Likelihood:                -6395.8
No. Observations:                  267   AIC:                         1.280e+04
Df Residuals:                      265   BIC:                         1.280e+04
Df Model:                            1
Covariance Type:             nonrobust
==============================================================================================================================
                                                   coef    std err          t      P>|t|      [0.025      0.975]
-------------------------------------------------------------------------------------------------------------------
const                                        -9.487e+08   4.52e+08     -2.101      0.037   -1.84e+09   -5.95e+07
External balance on goods and services (% of GDP) -2.039e+07   2.37e+07     -0.859      0.391   -6.71e+07    2.63e+07
==============================================================================
Omnibus:                      211.504   Durbin-Watson:                   2.426
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8657.105
Skew:                          -2.675   Prob(JB):                         0.00
Kurtosis:                      30.378   Cond. No.                         22.9
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

```
LM Statistic: 3.563816934972799
LM P-Value: 0.16831661376327917
F Statistic: 1.7857221811488557
F P-Value: 0.1696952288986055
```

Rainbow Test Results:

```
Rainbow Statistic: 3.327942354713605
Rainbow P-Value: 1.0446552252670582e-11
```

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.000
Model:                           OLS   Adj. R-squared:                 -0.004
Method:                Least Squares   F-statistic:                 0.0004010
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.984
Time:                       19:11:21   Log-Likelihood:                -5814.1
No. Observations:                245   AIC:                         1.163e+04
Df Residuals:                    243   BIC:                         1.164e+04
Df Model:                          1
Covariance Type:           nonrobust
==================================================================================================
                                      coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------
const                           -2.589e+08   4.62e+08     -0.560      0.576   -1.17e+09    6.51e+08
External debt stocks (% of GNI)  1.076e+05   5.37e+06      0.020      0.984   -1.05e+07    1.07e+07
==============================================================================
Omnibus:                      185.565   Durbin-Watson:                   2.510
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            12133.092
Skew:                          -2.255   Prob(JB):                         0.00
Kurtosis:                      37.179   Cond. No.                         127.
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 4.003143161457057
LM P-Value: 0.13512275995607612
F Statistic: 2.0099030704820215
F P-Value: 0.1362324534644577

Rainbow Test Results:

Rainbow Statistic: 5.553575110652624
Rainbow P-Value: 2.68813746418945e-19

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.008
Model:                             OLS   Adj. R-squared:                  0.004
Method:                  Least Squares   F-statistic:                     1.281
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.259
Time:                         19:11:21   Log-Likelihood:                -5840.7
No. Observations:                  245   AIC:                         1.169e+04
Df Residuals:                      243   BIC:                         1.169e+04
Df Model:                            1
Covariance Type:                   HC3
=================================================================================
                      coef    std err          z      P>|z|      [0.025      0.975]
---------------------------------------------------------------------------------
const            2.119e+09    2.3e+09      0.920      0.357   -2.39e+09    6.63e+09
Food Price Index -3.203e+07   2.83e+07     -1.132      0.258   -8.75e+07    2.34e+07
==============================================================================
Omnibus:                      233.778   Durbin-Watson:                   1.737
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            14405.399
Skew:                          -3.375   Prob(JB):                         0.00
Kurtosis:                      39.954   Cond. No.                         530.
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 4.869281645297291
LM P-Value: 0.0876292158259248
F Statistic: 2.4535931226036434
F P-Value: 0.08812069629245363

Rainbow Test Results:

Rainbow Statistic: 5.420218249174913
Rainbow P-Value: 7.464289073048168e-19

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.002
Model:                             OLS   Adj. R-squared:                 -0.003
Method:                  Least Squares   F-statistic:                    0.3996
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.528
Time:                         19:11:21   Log-Likelihood:                -5654.0
No. Observations:                  237   AIC:                         1.131e+04
Df Residuals:                      235   BIC:                         1.132e+04
Df Model:                            1
Covariance Type:             nonrobust
=================================================================================================
                                 coef    std err          t      P>|t|      [0.025      0.975]
-------------------------------------------------------------------------------------------------
const                      -7.288e+08   3.73e+08     -1.954      0.052   -1.46e+09    5.93e+06
Food Price Index (% change) -2.271e+09   3.59e+09     -0.632      0.528   -9.35e+09    4.81e+09
==============================================================================
Omnibus:                      231.558   Durbin-Watson:                   1.721
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            14205.408
Skew:                          -3.484   Prob(JB):                         0.00
Kurtosis:                      40.282   Cond. No.                         9.92
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.823278370589062
LM P-Value: 0.6625632955089853
F Statistic: 0.4078453147049089
F P-Value: 0.6655535909556567

Rainbow Test Results:

Rainbow Statistic: 5.410130426412447
Rainbow P-Value: 2.9584039946223652e-18

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.001
Model:                             OLS   Adj. R-squared:                 -0.002
Method:                  Least Squares   F-statistic:                    0.4424
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.506
Time:                         19:11:22   Log-Likelihood:                -7213.5
No. Observations:                  302   AIC:                         1.443e+04
Df Residuals:                      300   BIC:                         1.444e+04
Df Model:                            1
Covariance Type:             nonrobust
===============================================================================================================
                                                  coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------------
const                                       -4.862e+08    3.6e+08     -1.350      0.178    -1.2e+09    2.23e+08
Foreign direct investment, net inflows (% of GDP) -2.104e+07   3.16e+07     -0.665      0.506   -8.33e+07    4.12e+07
==============================================================================
Omnibus:                      261.845   Durbin-Watson:                   2.428
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            14270.731
Skew:                          -3.077   Prob(JB):                         0.00
Kurtosis:                      36.109   Cond. No.                         12.4
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.5615890097078504
LM P-Value: 0.7551835060811547
F Statistic: 0.2785230876035462
F P-Value: 0.7570969511705283

Rainbow Test Results:

Rainbow Statistic: 3.3616882374731047
Rainbow P-Value: 3.1635306423909767e-13

Regression Summary:

```
                         OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.009
Model:                           OLS   Adj. R-squared:                  0.006
Method:                Least Squares   F-statistic:                   0.06199
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.804
Time:                       19:11:22   Log-Likelihood:                -7472.4
No. Observations:                313   AIC:                         1.495e+04
Df Residuals:                    311   BIC:                         1.496e+04
Df Model:                          1
Covariance Type:                 HC3
===========================================================================================
                          coef    std err          z      P>|z|      [0.025      0.975]
-------------------------------------------------------------------------------------------
const                 -4.598e+08   4.33e+08     -1.062      0.288   -1.31e+09    3.89e+08
GDP (constant 2015 US$)    -0.0031      0.012     -0.249      0.803      -0.028       0.021
==============================================================================
Omnibus:                     198.754   Durbin-Watson:                   2.463
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            11728.018
Skew:                         -1.825   Prob(JB):                         0.00
Kurtosis:                     32.765   Cond. No.                     1.92e+11
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
[2] The condition number is large, 1.92e+11. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 194.5843459604967
LM P-Value: 3.1748873433044077e-44
F Statistic: 511.04503103556317
F P-Value: 1.3048542106458867e-67

Rainbow Test Results:

Rainbow Statistic: 3.3413779253002325
Rainbow P-Value: 1.6036283837262709e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.014
Model:                           OLS   Adj. R-squared:                  0.011
Method:                Least Squares   F-statistic:                     4.390
Date:               Sat, 26 Aug 2023   Prob (F-statistic):             0.0370
Time:                       19:11:23   Log-Likelihood:                -7424.8
No. Observations:                311   AIC:                         1.485e+04
Df Residuals:                    309   BIC:                         1.486e+04
Df Model:                          1
Covariance Type:           nonrobust
=======================================================================================
                          coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------
const               -1.059e+09   3.79e+08     -2.793      0.006   -1.81e+09   -3.13e+08
GDP growth (annual %)  1.119e+08   5.34e+07      2.095      0.037    6.81e+06    2.17e+08
==============================================================================
Omnibus:                     267.761   Durbin-Watson:                   2.458
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            14400.767
Skew:                         -3.067   Prob(JB):                         0.00
Kurtosis:                     35.767   Cond. No.                         8.43
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.03843736803925302
LM P-Value: 0.9809648174555095
F Statistic: 0.019035647454125188
F P-Value: 0.9811455405223163

Rainbow Test Results:

Rainbow Statistic: 3.611455729639068
Rainbow P-Value: 6.712479409294268e-15

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.001
Model:                             OLS   Adj. R-squared:                 -0.002
Method:                  Least Squares   F-statistic:                    0.3984
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.528
Time:                         19:11:23   Log-Likelihood:                -7777.5
No. Observations:                  326   AIC:                         1.556e+04
Df Residuals:                      324   BIC:                         1.557e+04
Df Model:                            1
Covariance Type:            nonrobust
==============================================================================================
                                 coef    std err          t      P>|t|      [0.025      0.975]
----------------------------------------------------------------------------------------------
const                      -1.344e+09   1.18e+09     -1.139      0.256   -3.66e+09    9.78e+08
GDP growth China (annual %)  7.431e+07   1.18e+08      0.631      0.528   -1.57e+08    3.06e+08
==============================================================================
Omnibus:                      281.423   Durbin-Watson:                   2.397
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            16263.217
Skew:                          -3.085   Prob(JB):                         0.00
Kurtosis:                      37.047   Cond. No.                         38.7
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.5424553837098021
LM P-Value: 0.7624428746073055
F Statistic: 0.2691796393056993
F P-Value: 0.7641772141023662

Rainbow Test Results:

Rainbow Statistic: 3.211323846294206
Rainbow P-Value: 2.805959244337912e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.010
Model:                           OLS   Adj. R-squared:                  0.007
Method:                Least Squares   F-statistic:                     3.223
Date:               Sat, 26 Aug 2023   Prob (F-statistic):             0.0736
Time:                       19:11:24   Log-Likelihood:                -7776.1
No. Observations:                326   AIC:                         1.556e+04
Df Residuals:                    324   BIC:                         1.556e+04
Df Model:                          1
Covariance Type:           nonrobust
=============================================================================================
                             coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------
const                  -1.224e+09   4.54e+08     -2.697      0.007   -2.12e+09   -3.31e+08
GDP growth USA (annual %)  2.612e+08   1.46e+08      1.795      0.074    -2.5e+07    5.48e+08
==============================================================================
Omnibus:                     279.729   Durbin-Watson:                   2.388
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            16251.887
Skew:                         -3.051   Prob(JB):                         0.00
Kurtosis:                     37.047   Cond. No.                         4.87
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 1.4688972316857394
LM P-Value: 0.47976992359233006
F Statistic: 0.7309835664244575
F P-Value: 0.48222992912536455

Rainbow Test Results:

Rainbow Statistic: 3.280798386210824
Rainbow P-Value: 1.109374366662166e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.038
Model:                             OLS   Adj. R-squared:                  0.035
Method:                  Least Squares   F-statistic:                     2.068
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.151
Time:                         19:11:24   Log-Likelihood:                -7421.0
No. Observations:                  311   AIC:                         1.485e+04
Df Residuals:                      309   BIC:                         1.485e+04
Df Model:                            1
Covariance Type:                   HC3
==========================================================================================================
                                         coef    std err          z      P>|z|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------
const                               1.121e+08   4.02e+08      0.279      0.780   -6.76e+08       9e+08
GDP per capita (constant 2015 US$) -1.678e+05   1.17e+05     -1.438      0.150   -3.96e+05    6.09e+04
==============================================================================
Omnibus:                      227.259   Durbin-Watson:                   2.410
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            11544.219
Skew:                          -2.357   Prob(JB):                         0.00
Kurtosis:                      32.473   Cond. No.                     9.64e+03
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
[2] The condition number is large, 9.64e+03. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 23.75779837779394
LM P-Value: 6.935210239795755e-06
F Statistic: 12.737337792001599
F P-Value: 4.843174277960058e-06

Rainbow Test Results:

Rainbow Statistic: 3.263810266464775
Rainbow P-Value: 5.094123812576682e-13

Regression Summary:

```
                         OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.001
Model:                            OLS   Adj. R-squared:                 -0.003
Method:                 Least Squares   F-statistic:                    0.2591
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.611
Time:                        19:11:24   Log-Likelihood:                -6114.4
No. Observations:                 255   AIC:                         1.223e+04
Df Residuals:                     253   BIC:                         1.224e+04
Df Model:                           1
Covariance Type:            nonrobust
================================================================================================================================
                                                              coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------------------------------------
const                                                   -1.224e+09   9.69e+08     -1.263      0.208   -3.13e+09    6.85e+08
General government final consumption expenditure (% of GDP)  2.946e+07   5.79e+07      0.509      0.611   -8.45e+07    1.43e+08
==============================================================================
Omnibus:                      203.783   Durbin-Watson:                   2.364
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             7638.437
Skew:                          -2.716   Prob(JB):                         0.00
Kurtosis:                      29.257   Cond. No.                         41.3
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 1.3073331508764818
LM P-Value: 0.5201351613864986
F Statistic: 0.6493052363567254
F P-Value: 0.5232803289562432

Rainbow Test Results:

Rainbow Statistic: 3.3664766963713233
Rainbow P-Value: 2.0002340549800495e-11

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.003
Model:                            OLS   Adj. R-squared:                 -0.002
Method:                 Least Squares   F-statistic:                    0.5428
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.462
Time:                        19:11:25   Log-Likelihood:                -4811.0
No. Observations:                 200   AIC:                             9626.
Df Residuals:                     198   BIC:                             9633.
Df Model:                           1
Covariance Type:            nonrobust
=========================================================================================================================================
                                                                  coef    std err          t      P>|t|      [0.025      0.975]
-----------------------------------------------------------------------------------------------------------------------------------------
const                                                        -1.14e+09    5.4e+08     -2.110      0.036   -2.21e+09   -7.45e+07
General government final consumption expenditure (annual % growth)  3.654e+07   4.96e+07      0.737      0.462   -6.13e+07    1.34e+08
==============================================================================
Omnibus:                      166.609   Durbin-Watson:                   2.286
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             4573.195
Skew:                          -2.836   Prob(JB):                         0.00
Kurtosis:                      25.729   Cond. No.                         12.3
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.5933804484513416
LM P-Value: 0.7432742250515461
F Statistic: 0.2931094980893889
F P-Value: 0.7462651941442431

Rainbow Test Results:

Rainbow Statistic: 5.315470225490648
Rainbow P-Value: 2.0358798887677964e-15

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.006
Model:                           OLS   Adj. R-squared:                  0.002
Method:                Least Squares   F-statistic:                     1.551
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.214
Time:                       19:11:25   Log-Likelihood:                -6301.6
No. Observations:                263   AIC:                         1.261e+04
Df Residuals:                    261   BIC:                         1.261e+04
Df Model:                          1
Covariance Type:           nonrobust
==========================================================================================================
                                      coef    std err          t      P>|t|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------
const                            3.424e+08   9.49e+08      0.361      0.719   -1.53e+09    2.21e+09
Gross capital formation (% of GDP) -4.568e+07   3.67e+07     -1.245      0.214   -1.18e+08    2.66e+07
==============================================================================
Omnibus:                      213.819   Durbin-Watson:                   2.400
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8702.371
Skew:                          -2.782   Prob(JB):                         0.00
Kurtosis:                      30.626   Cond. No.                         64.5
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.16644333226746177
LM P-Value: 0.9201471591491044
F Statistic: 0.08232446978649835
F P-Value: 0.9209970790989849

Rainbow Test Results:

Rainbow Statistic: 3.4143335187980406
Rainbow P-Value: 5.9189973637238176e-12

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.000
Model:                            OLS   Adj. R-squared:                 -0.005
Method:                 Least Squares   F-statistic:                  0.002884
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.957
Time:                        19:11:26   Log-Likelihood:                -4404.8
No. Observations:                 184   AIC:                             8814.
Df Residuals:                     182   BIC:                             8820.
Df Model:                           1
Covariance Type:            nonrobust
===========================================================================================
                            coef    std err          t      P>|t|      [0.025      0.975]
-------------------------------------------------------------------------------------------
const                 -6.488e+08   6.59e+08     -0.984      0.326   -1.95e+09    6.52e+08
Gross debt (% of GDP) -4.428e+05   8.25e+06     -0.054      0.957   -1.67e+07    1.58e+07
==============================================================================
Omnibus:                      184.071   Durbin-Watson:                   1.698
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             9417.148
Skew:                          -3.417   Prob(JB):                         0.00
Kurtosis:                      37.375   Cond. No.                         118.
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 1.0147109126079537
LM P-Value: 0.6020857172782976
F Statistic: 0.5018509304710406
F P-Value: 0.6062489354468399

Rainbow Test Results:

Rainbow Statistic: 6.801624257495545
Rainbow P-Value: 8.553044694386386e-18

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.006
Model:                            OLS   Adj. R-squared:                  0.002
Method:                 Least Squares   F-statistic:                     1.636
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.202
Time:                        19:11:27   Log-Likelihood:                -6184.1
No. Observations:                 258   AIC:                         1.237e+04
Df Residuals:                     256   BIC:                         1.238e+04
Df Model:                           1
Covariance Type:            nonrobust
==========================================================================================================
                                      coef    std err          t      P>|t|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------
const                           -3.295e+08   5.15e+08     -0.640      0.523   -1.34e+09    6.85e+08
Gross domestic savings (% of GDP) -2.984e+07   2.33e+07     -1.279      0.202   -7.58e+07    1.61e+07
==============================================================================
Omnibus:                      201.791   Durbin-Watson:                   2.412
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             7880.996
Skew:                          -2.615   Prob(JB):                         0.00
Kurtosis:                      29.566   Cond. No.                         29.3
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 2.4351403656064994
LM P-Value: 0.29594839448808025
F Statistic: 1.214879060677578
F P-Value: 0.29845753975803074

Rainbow Test Results:

Rainbow Statistic: 3.368280933881658
Rainbow P-Value: 1.4503095043406933e-11

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.001
Model:                           OLS   Adj. R-squared:                 -0.003
Method:                Least Squares   F-statistic:                    0.3116
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.577
Time:                       19:11:27   Log-Likelihood:                -6137.8
No. Observations:                256   AIC:                         1.228e+04
Df Residuals:                    254   BIC:                         1.229e+04
Df Model:                          1
Covariance Type:           nonrobust
=========================================================================================================
                                          coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------
const                               -2.387e+09   2.93e+09     -0.815      0.416   -8.15e+09    3.38e+09
Gross national expenditure (% of GDP)  1.485e+07   2.66e+07      0.558      0.577   -3.75e+07    6.72e+07
==============================================================================
Omnibus:                      200.804   Durbin-Watson:                   2.421
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             7588.531
Skew:                          -2.635   Prob(JB):                         0.00
Kurtosis:                      29.147   Cond. No.                         821.
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.1301307170022596
LM P-Value: 0.20907434794071214
F Statistic: 1.565870765162802
F P-Value: 0.21092376795922274

Rainbow Test Results:

Rainbow Statistic: 3.3537563733358238
Rainbow P-Value: 2.0141815270910855e-11

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.000
Model:                            OLS   Adj. R-squared:                 -0.004
Method:                 Least Squares   F-statistic:                 0.0003329
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.985
Time:                        19:11:28   Log-Likelihood:                -6396.2
No. Observations:                 267   AIC:                         1.280e+04
Df Residuals:                     265   BIC:                         1.280e+04
Df Model:                           1
Covariance Type:                  HC3
=========================================================================================================
                                            coef    std err          z      P>|z|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------
const                                 -7.493e+08   1.15e+09     -0.653      0.514      -3e+09     1.5e+09
Imports of goods and services (% of GDP)  3.648e+05      2e+07      0.018      0.985   -3.88e+07    3.96e+07
==============================================================================
Omnibus:                      215.457   Durbin-Watson:                   2.415
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8784.051
Skew:                          -2.758   Prob(JB):                         0.00
Kurtosis:                      30.553   Cond. No.                         103.
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 13.787315167199083
LM P-Value: 0.0010141975365150603
F Statistic: 7.187339778305329
F P-Value: 0.0009132590224671544

Rainbow Test Results:

Rainbow Statistic: 3.419212850725463
Rainbow P-Value: 3.907715143722358e-12

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.011
Model:                             OLS   Adj. R-squared:                  0.007
Method:                  Least Squares   F-statistic:                     2.470
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.118
Time:                         19:11:28   Log-Likelihood:                -5233.9
No. Observations:                  218   AIC:                         1.047e+04
Df Residuals:                      216   BIC:                         1.048e+04
Df Model:                            1
Covariance Type:            nonrobust
==============================================================================================================
                                                 coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------------------
const                                      -1.155e+09    4.6e+08     -2.511      0.013   -2.06e+09   -2.48e+08
Imports of goods and services (annual % growth)  4.477e+07   2.85e+07      1.572      0.118   -1.14e+07    1.01e+08
==============================================================================
Omnibus:                      191.391   Durbin-Watson:                   2.338
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             6086.839
Skew:                          -3.101   Prob(JB):                         0.00
Kurtosis:                      28.133   Cond. No.                         16.9
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.5648644567167653
LM P-Value: 0.7539477365037173
F Statistic: 0.27926916661987766
F P-Value: 0.7566102317362066

Rainbow Test Results:

Rainbow Statistic: 4.869552403615339
Rainbow P-Value: 2.7952228166814112e-15

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.001
Model:                             OLS   Adj. R-squared:                 -0.003
Method:                  Least Squares   F-statistic:                    0.2109
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.646
Time:                         19:11:29   Log-Likelihood:                -6450.4
No. Observations:                  272   AIC:                         1.290e+04
Df Residuals:                      270   BIC:                         1.291e+04
Df Model:                            1
Covariance Type:             nonrobust
======================================================================================================
                                          coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------------------
const                               -4.953e+08   3.59e+08     -1.381      0.168    -1.2e+09    2.11e+08
Inflation, consumer prices (annual %)  9.882e+06   2.15e+07      0.459      0.646   -3.25e+07    5.22e+07
==============================================================================
Omnibus:                      243.976   Durbin-Watson:                   1.804
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            26784.257
Skew:                          -2.900   Prob(JB):                         0.00
Kurtosis:                      51.267   Cond. No.                         20.4
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.6087233822656497
LM P-Value: 0.7375940369757739
F Statistic: 0.3016799063517795
F P-Value: 0.7398246491825853

Rainbow Test Results:

Rainbow Statistic: 2.7645037524527103
Rainbow P-Value: 3.98279797450769e-09

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.010
Model:                           OLS   Adj. R-squared:                  0.002
Method:                Least Squares   F-statistic:                     1.318
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.253
Time:                       19:11:29   Log-Likelihood:                -3196.6
No. Observations:                134   AIC:                             6397.
Df Residuals:                    132   BIC:                             6403.
Df Model:                          1
Covariance Type:           nonrobust
==================================================================================================
                                      coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------
const                           -1.169e+09   6.43e+08     -1.817      0.071   -2.44e+09    1.03e+08
Interest payments (% of revenue)  4.864e+07   4.24e+07      1.148      0.253   -3.52e+07    1.32e+08
==============================================================================
Omnibus:                       83.944   Durbin-Watson:                   1.843
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             2172.684
Skew:                          -1.548   Prob(JB):                         0.00
Kurtosis:                      22.482   Cond. No.                         20.3
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 2.3446804209818835
LM P-Value: 0.3096414665064088
F Statistic: 1.166504840559357
F P-Value: 0.31466733933407404

Rainbow Test Results:

Rainbow Statistic: 1.961930115539451
Rainbow P-Value: 0.003508101449908512

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.000
Model:                             OLS   Adj. R-squared:                 -0.017
Method:                  Least Squares   F-statistic:                  0.001741
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.967
Time:                         19:11:29   Log-Likelihood:                -1506.2
No. Observations:                   62   AIC:                             3016.
Df Residuals:                       60   BIC:                             3021.
Df Model:                            1
Covariance Type:            nonrobust
=======================================================================================
                          coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------
const               -5.842e+08   1.38e+09     -0.424      0.673   -3.34e+09    2.17e+09
Net debt (% of GDP) -6.598e+05   1.58e+07     -0.042      0.967   -3.23e+07     3.1e+07
==============================================================================
Omnibus:                       58.879   Durbin-Watson:                   1.724
Prob(Omnibus):                  0.000   Jarque-Bera (JB):              895.738
Skew:                          -2.120   Prob(JB):                    3.11e-195
Kurtosis:                      21.132   Cond. No.                         108.
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.435593014611509
LM P-Value: 0.8042890919694516
F Statistic: 0.20872440035180084
F P-Value: 0.8122155971640512

Rainbow Test Results:

Rainbow Statistic: 8.092698632819792
Rainbow P-Value: 9.566987734974487e-08

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.009
Model:                            OLS   Adj. R-squared:                  0.004
Method:                 Least Squares   F-statistic:                     1.805
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.181
Time:                        19:11:30   Log-Likelihood:                -4784.1
No. Observations:                 200   AIC:                             9572.
Df Residuals:                     198   BIC:                             9579.
Df Model:                           1
Covariance Type:            nonrobust
==================================================================================================================
                                                 coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------------------------------
const                                      -4.871e+08   4.66e+08     -1.045      0.298   -1.41e+09    4.32e+08
Net lending/borrowing (overall balance) (% of GDP)  9.175e+07   6.83e+07      1.344      0.181   -4.29e+07    2.26e+08
==============================================================================
Omnibus:                      190.080   Durbin-Watson:                   1.762
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             9233.116
Skew:                          -3.245   Prob(JB):                         0.00
Kurtosis:                      35.647   Cond. No.                         7.60
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.173540720230972
LM P-Value: 0.2045852826997793
F Statistic: 1.5881694061184666
F P-Value: 0.2069036763574869

Rainbow Test Results:

Rainbow Statistic: 6.129414136264494
Rainbow P-Value: 1.4239133476495318e-17

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.840
Model:                           OLS   Adj. R-squared:                  0.800
Method:                Least Squares   F-statistic:                     21.01
Date:               Sat, 26 Aug 2023   Prob (F-statistic):             0.0102
Time:                       19:11:30   Log-Likelihood:                -137.19
No. Observations:                  6   AIC:                             278.4
Df Residuals:                      4   BIC:                             278.0
Df Model:                          1
Covariance Type:           nonrobust
=========================================================================================================
                                            coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------
const                                   4.22e+09   1.73e+09      2.444      0.071   -5.74e+08    9.01e+09
Net official aid received (current US$)   -42.4894      9.269     -4.584      0.010     -68.225     -16.753
==============================================================================
Omnibus:                         nan   Durbin-Watson:                   2.739
Prob(Omnibus):                   nan   Jarque-Bera (JB):                0.851
Skew:                          0.673   Prob(JB):                        0.653
Kurtosis:                      1.738   Cond. No.                     3.12e+08
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 3.12e+08. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 2.658438555865422
LM P-Value: 0.10300180336610097
F Statistic: 3.1822710434150623
F P-Value: 0.1490069641263513

Rainbow Test Results:

Rainbow Statistic: 39.66168972485643
Rainbow P-Value: 0.11607590458528504

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.001
Model:                            OLS   Adj. R-squared:                 -0.002
Method:                 Least Squares   F-statistic:                    0.3229
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.570
Time:                        19:11:31   Log-Likelihood:                -7377.1
No. Observations:                 309   AIC:                         1.476e+04
Df Residuals:                     307   BIC:                         1.477e+04
Df Model:                           1
Covariance Type:            nonrobust
==============================================================================================================================
                                                          coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------------------------------------
const                                               -6.116e+08   3.31e+08     -1.848      0.066   -1.26e+09    3.98e+07
Official exchange rate (LCU per US$, period average)  1.514e+05   2.66e+05      0.568      0.570   -3.73e+05    6.76e+05
==============================================================================
Omnibus:                      268.564   Durbin-Watson:                   2.406
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            15176.631
Skew:                          -3.091   Prob(JB):                         0.00
Kurtosis:                      36.772   Cond. No.                     1.27e+03
==============================================================================
```

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 1.27e+03. This might indicate that there are
strong multicollinearity or other numerical problems.

White Test Results:

LM Statistic: 0.11295455378943875
LM P-Value: 0.9450879595843605
F Statistic: 0.0559494060517194
F P-Value: 0.9455966465695089

Rainbow Test Results:

Rainbow Statistic: 3.3165045202309216
Rainbow P-Value: 3.107813039927470e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.004
Model:                           OLS   Adj. R-squared:                  0.001
Method:                Least Squares   F-statistic:                    0.7790
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.378
Time:                       19:11:31   Log-Likelihood:                -7777.1
No. Observations:                326   AIC:                         1.556e+04
Df Residuals:                    324   BIC:                         1.557e+04
Df Model:                          1
Covariance Type:                 HC3
==============================================================================
                 coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
const       4.227e+07   6.23e+08      0.068      0.946   -1.18e+09    1.26e+09
Oil price  -8.963e+06   1.02e+07     -0.883      0.377   -2.89e+07    1.09e+07
==============================================================================
Omnibus:                     275.295   Durbin-Watson:                   2.413
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            15678.146
Skew:                         -2.979   Prob(JB):                         0.00
Kurtosis:                     36.447   Cond. No.                         186.
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 4.956430639402801
LM P-Value: 0.08389281392101891
F Statistic: 2.4933174953723176
F P-Value: 0.08422472267807284

Rainbow Test Results:

Rainbow Statistic: 3.2012801313724077
Rainbow P-Value: 3.2106308921682973e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.000
Model:                           OLS   Adj. R-squared:                 -0.003
Method:                Least Squares   F-statistic:                    0.1259
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.723
Time:                       19:11:31   Log-Likelihood:                -7777.7
No. Observations:                326   AIC:                         1.556e+04
Df Residuals:                    324   BIC:                         1.557e+04
Df Model:                          1
Covariance Type:           nonrobust
=====================================================================================
                        coef    std err          t      P>|t|      [0.025      0.975]
-------------------------------------------------------------------------------------
const             -6.191e+08   3.09e+08     -2.001      0.046   -1.23e+09   -1.06e+07
Oil price (% change) -4.662e+08   1.31e+09     -0.355      0.723   -3.05e+09    2.12e+09
==============================================================================
Omnibus:                      280.164   Durbin-Watson:                   2.406
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            16266.464
Skew:                          -3.060   Prob(JB):                         0.00
Kurtosis:                      37.060   Cond. No.                         4.25
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.1037786803092917
LM P-Value: 0.2118473437894326
F Statistic: 1.552388116594484
F P-Value: 0.21331729621181075

Rainbow Test Results:

Rainbow Statistic: 3.249614994718392
Rainbow P-Value: 1.681094538494888e-13

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.054
Model:                            OLS   Adj. R-squared:                  0.048
Method:                 Least Squares   F-statistic:                     4.306
Date:                Sat, 26 Aug 2023   Prob (F-statistic):             0.0395
Time:                        19:11:32   Log-Likelihood:                -4051.8
No. Observations:                 169   AIC:                             8108.
Df Residuals:                     167   BIC:                             8114.
Df Model:                           1
Covariance Type:                  HC3
==============================================================================
                 coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
const      -1.813e+09   9.18e+08     -1.975      0.048   -3.61e+09   -1.35e+07
PV:GE      -2.169e+09   1.05e+09     -2.075      0.038   -4.22e+09    -1.2e+08
==============================================================================
Omnibus:                      139.910   Durbin-Watson:                   1.663
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             4946.310
Skew:                          -2.542   Prob(JB):                         0.00
Kurtosis:                      29.011   Cond. No.                         1.94
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 8.122932787445627
LM P-Value: 0.01722374379830311
F Statistic: 4.190798807061879
F P-Value: 0.01676552573439998

Rainbow Test Results:

Rainbow Statistic: 6.951720605999249
Rainbow P-Value: 1.0438437375822319e-16

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.019
Model:                           OLS   Adj. R-squared:                  0.014
Method:                Least Squares   F-statistic:                     3.666
Date:               Sat, 26 Aug 2023   Prob (F-statistic):             0.0570
Time:                       19:11:32   Log-Likelihood:                -4615.8
No. Observations:                193   AIC:                             9236.
Df Residuals:                    191   BIC:                             9242.
Df Model:                          1
Covariance Type:           nonrobust
===========================================================================================================================================
                                                             coef    std err          t      P>|t|      [0.025      0.975]
---------------------------------------------------------------------------------------------------------------------------
const                                                  -5.442e+08   4.34e+08     -1.253      0.212    -1.4e+09    3.12e+08
Primary net lending/borrowing (primary balance) (% of GDP)  1.397e+08   7.29e+07      1.915      0.057   -4.21e+06    2.84e+08
==============================================================================
Omnibus:                     187.445   Durbin-Watson:                   1.760
Prob(Omnibus):                 0.000   Jarque-Bera (JB):             9331.948
Skew:                         -3.315   Prob(JB):                         0.00
Kurtosis:                     36.414   Cond. No.                         6.07
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 2.067751047940952
LM P-Value: 0.35562604914190793
F Statistic: 1.028827506262248
F P-Value: 0.359408223099038

Rainbow Test Results:

Rainbow Statistic: 5.749872517256087
Rainbow P-Value: 5.0227362602774575e-16

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.057
Model:                           OLS   Adj. R-squared:                  0.052
Method:                Least Squares   F-statistic:                     11.09
Date:               Sat, 26 Aug 2023   Prob (F-statistic):            0.00105
Time:                       19:11:33   Log-Likelihood:                -4397.5
No. Observations:                186   AIC:                             8799.
Df Residuals:                    184   BIC:                             8806.
Df Model:                          1
Covariance Type:           nonrobust
==========================================================================================
                             coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------
const                  -9.842e+08   3.84e+08     -2.562      0.011   -1.74e+09   -2.26e+08
Real interest rate (%)  8.542e+07   2.56e+07      3.331      0.001    3.48e+07    1.36e+08
==============================================================================
Omnibus:                      119.027   Durbin-Watson:                   1.676
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8583.878
Skew:                          -1.478   Prob(JB):                         0.00
Kurtosis:                      36.149   Cond. No.                         17.4
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.072116887714097
LM P-Value: 0.2152277640622596
F Statistic: 1.5366640144919566
F P-Value: 0.2178598723026022

Rainbow Test Results:

Rainbow Statistic: 5.882366900363083
Rainbow P-Value: 7.345172060864504e-16

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.001
Model:                           OLS   Adj. R-squared:                 -0.002
Method:                Least Squares   F-statistic:                    0.4809
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.489
Time:                       19:11:33   Log-Likelihood:                -7777.5
No. Observations:                326   AIC:                         1.556e+04
Df Residuals:                    324   BIC:                         1.557e+04
Df Model:                          1
Covariance Type:           nonrobust
==================================================================================================
                                coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------
const                     -1.089e+09   7.37e+08     -1.477      0.141   -2.54e+09    3.61e+08
Real interest rate USA (%)      1e+08   1.44e+08      0.693      0.489   -1.84e+08    3.84e+08
==============================================================================
Omnibus:                     279.076   Durbin-Watson:                   2.410
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            15996.492
Skew:                         -3.045   Prob(JB):                         0.00
Kurtosis:                     36.772   Cond. No.                         12.6
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.0651199654729826
LM P-Value: 0.21598204867527038
F Statistic: 1.5328690241542282
F P-Value: 0.21748179009756802

Rainbow Test Results:

Rainbow Statistic: 3.224459190077336
Rainbow P-Value: 2.3531865928108797e-13

Regression Summary:

```
                    OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.008
Model:                           OLS   Adj. R-squared:                  0.003
Method:                Least Squares   F-statistic:                     1.287
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.258
Time:                       19:11:33   Log-Likelihood:                -4878.1
No. Observations:                204   AIC:                             9760.
Df Residuals:                    202   BIC:                             9767.
Df Model:                          1
Covariance Type:                 HC3
=====================================================================================
                  coef    std err          z      P>|z|      [0.025      0.975]
-------------------------------------------------------------------------------------
const              4.496e+08   7.18e+08      0.626      0.531   -9.57e+08    1.86e+09
Revenue (% of GDP)  -4.96e+07   4.37e+07     -1.134      0.257   -1.35e+08    3.61e+07
==============================================================================
Omnibus:                     192.204   Durbin-Watson:                   1.705
Prob(Omnibus):                 0.000   Jarque-Bera (JB):             9887.460
Skew:                         -3.193   Prob(JB):                         0.00
Kurtosis:                     36.503   Cond. No.                         63.3
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 6.557483395447813
LM P-Value: 0.037675634329733164
F Statistic: 3.3378174699952736
F P-Value: 0.03749352764703347

Rainbow Test Results:

Rainbow Statistic: 6.054795919182195
Rainbow P-Value: 1.0610493218991181e-17

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.006
Model:                           OLS   Adj. R-squared:                  0.002
Method:                Least Squares   F-statistic:                     1.349
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.247
Time:                       19:11:34   Log-Likelihood:                -5999.2
No. Observations:                253   AIC:                         1.200e+04
Df Residuals:                    251   BIC:                         1.201e+04
Df Model:                          1
Covariance Type:                 HC3
==================================================================================================================
                                              coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------------------------------------------
const                                    1.055e+08   2.11e+08      0.500      0.617   -3.08e+08    5.19e+08
Short-term debt (% of total external debt) -3.062e+07   2.64e+07     -1.161      0.245   -8.23e+07     2.1e+07
==============================================================================
Omnibus:                     185.712   Durbin-Watson:                   2.514
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            13122.200
Skew:                         -2.132   Prob(JB):                         0.00
Kurtosis:                     38.023   Cond. No.                         23.2
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 9.942518114641219
LM P-Value: 0.006934411714303083
F Statistic: 5.113254505435643
F P-Value: 0.006661302126683559

Rainbow Test Results:

Rainbow Statistic: 5.51878430097607
Rainbow P-Value: 9.301879187656004e-20

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.000
Model:                             OLS   Adj. R-squared:                 -0.005
Method:                  Least Squares   F-statistic:                 0.0005227
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.982
Time:                         19:11:34   Log-Likelihood:                -5185.8
No. Observations:                  218   AIC:                         1.038e+04
Df Residuals:                      216   BIC:                         1.038e+04
Df Model:                            1
Covariance Type:             nonrobust
========================================================================================================
                                           coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------------------------------
const                                -2.605e+08   3.54e+08     -0.736      0.462   -9.58e+08    4.37e+08
Short-term debt (% of total reserves)   347.2549   1.52e+04      0.023      0.982   -2.96e+04    3.03e+04
==============================================================================
Omnibus:                      160.038   Durbin-Watson:                   2.474
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8488.142
Skew:                          -2.132   Prob(JB):                         0.00
Kurtosis:                      33.270   Cond. No.                     2.34e+04
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 2.34e+04. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 0.031409803628297484
LM P-Value: 0.9844177770966452
F Statistic: 0.0154910112828622
F P-Value: 0.9846294561419777

Rainbow Test Results:

Rainbow Statistic: 5.577811527494609
Rainbow P-Value: 1.900050152467837e-17

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.021
Model:                             OLS   Adj. R-squared:                  0.018
Method:                  Least Squares   F-statistic:                    0.1215
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.728
Time:                         19:11:35   Log-Likelihood:                -6695.6
No. Observations:                  280   AIC:                         1.340e+04
Df Residuals:                      278   BIC:                         1.340e+04
Df Model:                            1
Covariance Type:                   HC3
==============================================================================
                 coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
const      -8.387e+08   5.05e+08     -1.659      0.097   -1.83e+09    1.52e+08
TRes           0.0413      0.119      0.349      0.727      -0.191       0.274
==============================================================================
Omnibus:                      280.196   Durbin-Watson:                   2.306
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            13818.335
Skew:                          -3.902   Prob(JB):                         0.00
Kurtosis:                      36.519   Cond. No.                     2.22e+10
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
[2] The condition number is large, 2.22e+10. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 49.78826049804312
LM P-Value: 1.7126563963870066e-12
F Statistic: 60.12350390297247
F P-Value: 1.6919781261957087e-13

Rainbow Test Results:

Rainbow Statistic: 3.2385373165099454
Rainbow P-Value: 9.026819106238106e-12

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.013
Model:                           OLS   Adj. R-squared:                  0.008
Method:                Least Squares   F-statistic:                    0.7091
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.401
Time:                       19:11:35   Log-Likelihood:                -5487.1
No. Observations:                231   AIC:                         1.098e+04
Df Residuals:                    229   BIC:                         1.099e+04
Df Model:                          1
Covariance Type:                 HC3
==============================================================================================================================================
                                                                                coef    std err          z      P>|z|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------------------------------------------
const                                                                      3.852e+08   5.48e+08      0.704      0.482   -6.88e+08    1.46e+09
Total debt service (% of exports of goods, services and primary income) -3.708e+07    4.4e+07     -0.842      0.400   -1.23e+08    4.92e+07
==============================================================================
Omnibus:                     149.149   Durbin-Watson:                   2.508
Prob(Omnibus):                 0.000   Jarque-Bera (JB):             8620.754
Skew:                         -1.720   Prob(JB):                         0.00
Kurtosis:                     32.729   Cond. No.                         34.9
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 16.34432780425661
LM P-Value: 0.00028240625529052507
F Statistic: 8.680196291231297
F P-Value: 0.0002327364268517342

Rainbow Test Results:

Rainbow Statistic: 5.496372021807738
Rainbow P-Value: 4.19796699021453e-18

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.005
Model:                           OLS   Adj. R-squared:                  0.002
Method:                Least Squares   F-statistic:                     1.382
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.241
Time:                       19:11:35   Log-Likelihood:                -6032.6
No. Observations:                252   AIC:                         1.207e+04
Df Residuals:                    250   BIC:                         1.208e+04
Df Model:                          1
Covariance Type:           nonrobust
=====================================================================================================
                                        coef    std err          t      P>|t|      [0.025      0.975]
-----------------------------------------------------------------------------------------------------
const                               -1.3e+09   5.81e+08     -2.236      0.026   -2.44e+09   -1.55e+08
Total reserves in months of imports  1.469e+08   1.25e+08      1.176      0.241   -9.92e+07    3.93e+08
==============================================================================
Omnibus:                      230.474   Durbin-Watson:                   2.286
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             9600.907
Skew:                          -3.330   Prob(JB):                         0.00
Kurtosis:                      32.496   Cond. No.                         7.28
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 0.0916852609294212
LM P-Value: 0.9551922685269955
F Statistic: 0.04531337124594308
F P-Value: 0.9557058256352026

Rainbow Test Results:

Rainbow Statistic: 4.622591804781344
Rainbow P-Value: 1.7196210825874742e-16

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.000
Model:                            OLS   Adj. R-squared:                 -0.003
Method:                 Least Squares   F-statistic:                   0.08438
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.772
Time:                        19:11:36   Log-Likelihood:                -6396.2
No. Observations:                 267   AIC:                         1.280e+04
Df Residuals:                     265   BIC:                         1.280e+04
Df Model:                           1
Covariance Type:                  HC3
==================================================================================
                      coef    std err          z      P>|z|      [0.025      0.975]
----------------------------------------------------------------------------------
const             -4.853e+08   1.13e+09     -0.430      0.667    -2.7e+09    1.73e+09
Trade (% of GDP) -3.398e+06   1.17e+07     -0.290      0.771   -2.63e+07    1.95e+07
==============================================================================
Omnibus:                      217.852   Durbin-Watson:                   2.406
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             8892.997
Skew:                          -2.808   Prob(JB):                         0.00
Kurtosis:                      30.710   Cond. No.                         180.
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 10.03220707764427
LM P-Value: 0.006630311192732602
F Statistic: 5.153374744706521
F P-Value: 0.006375307869250869

Rainbow Test Results:

Rainbow Statistic: 3.4454541102452803
Rainbow P-Value: 2.950974009070113e-12

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:           Sum_GDPcycle   R-squared:                       0.005
Model:                            OLS   Adj. R-squared:                  0.000
Method:                 Least Squares   F-statistic:                    0.4519
Date:                Sat, 26 Aug 2023   Prob (F-statistic):              0.502
Time:                        19:11:36   Log-Likelihood:                -5326.3
No. Observations:                 223   AIC:                         1.066e+04
Df Residuals:                     221   BIC:                         1.066e+04
Df Model:                           1
Covariance Type:                  HC3
====================================================================================================================================================
                                                                  coef    std err          z      P>|z|      [0.025      0.975]
----------------------------------------------------------------------------------------------------------------------------------------------------
const                                                        -3.18e+08   6.17e+08     -0.516      0.606   -1.53e+09    8.91e+08
Unemployment, total (% of total labor force) (modeled ILO estimate) -7.065e+07   1.05e+08     -0.672      0.501   -2.77e+08    1.35e+08
==============================================================================
Omnibus:                      208.180   Durbin-Watson:                   1.713
Prob(Omnibus):                  0.000   Jarque-Bera (JB):            10808.666
Skew:                          -3.231   Prob(JB):                         0.00
Kurtosis:                      36.489   Cond. No.                         15.2
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

White Test Results:

LM Statistic: 5.21701702823015
LM P-Value: 0.07364430132771675
F Statistic: 2.635062966235999
F P-Value: 0.07397733620357022

Rainbow Test Results:

Rainbow Statistic: 5.62278824085838
Rainbow P-Value: 6.577595747238009e-18

Regression Summary:

```
                            OLS Regression Results
==============================================================================
Dep. Variable:            Sum_GDPcycle   R-squared:                       0.010
Model:                             OLS   Adj. R-squared:                  0.002
Method:                  Least Squares   F-statistic:                     1.312
Date:                 Sat, 26 Aug 2023   Prob (F-statistic):              0.254
Time:                         19:11:37   Log-Likelihood:                -3224.0
No. Observations:                  134   AIC:                             6452.
Df Residuals:                      132   BIC:                             6458.
Df Model:                            1
Covariance Type:             nonrobust
====================================================================================================================================================
                                                                  coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------------------------------------------------
const                                                       -5.177e+08   9.69e+08     -0.534      0.594   -2.43e+09     1.4e+09
Unemployment, total (% of total labor force) (national estimate) -1.089e+08    9.5e+07     -1.145      0.254   -2.97e+08    7.91e+07
==============================================================================
Omnibus:                      133.930   Durbin-Watson:                   1.978
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             3204.800
Skew:                          -3.352   Prob(JB):                         0.00
Kurtosis:                      26.001   Cond. No.                         16.8
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
```

White Test Results:

LM Statistic: 3.8289294726559304
LM P-Value: 0.14742072042753068
F Statistic: 1.9266560491740023
F P-Value: 0.14973865162351585

Rainbow Test Results:

Rainbow Statistic: 4.837184053873023
Rainbow P-Value: 6.551452273368667e-10

Regression Summary:

```
                    OLS Regression Results
==============================================================================
Dep. Variable:          Sum_GDPcycle   R-squared:                       0.005
Model:                           OLS   Adj. R-squared:                  0.001
Method:                Least Squares   F-statistic:                   0.05912
Date:               Sat, 26 Aug 2023   Prob (F-statistic):              0.808
Time:                       19:11:37   Log-Likelihood:                -5669.9
No. Observations:                239   AIC:                         1.134e+04
Df Residuals:                    237   BIC:                         1.135e+04
Df Model:                          1
Covariance Type:                 HC3
===================================================================================================
                                      coef    std err          z      P>|z|      [0.025      0.975]
---------------------------------------------------------------------------------------------------
const                           -3.944e+08   5.39e+08     -0.732      0.464   -1.45e+09    6.62e+08
Use of IMF credit (DOD, current US$)     0.6138      2.525      0.243      0.808      -4.334       5.562
==============================================================================
Omnibus:                     206.375   Durbin-Watson:                   2.444
Prob(Omnibus):                 0.000   Jarque-Bera (JB):            14010.058
Skew:                         -2.785   Prob(JB):                         0.00
Kurtosis:                     40.092   Cond. No.                     6.89e+08
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
[2] The condition number is large, 6.89e+08. This might indicate that there are
strong multicollinearity or other numerical problems.
```

White Test Results:

LM Statistic: 29.718455161125537
LM P-Value: 4.9956953801752204e-08
F Statistic: 33.65453881090831
F P-Value: 2.0954785915056498e-08

Rainbow Test Results:

Rainbow Statistic: 7.069619433021138
Rainbow P-Value: 2.36762684402176e-23